

Figure 1

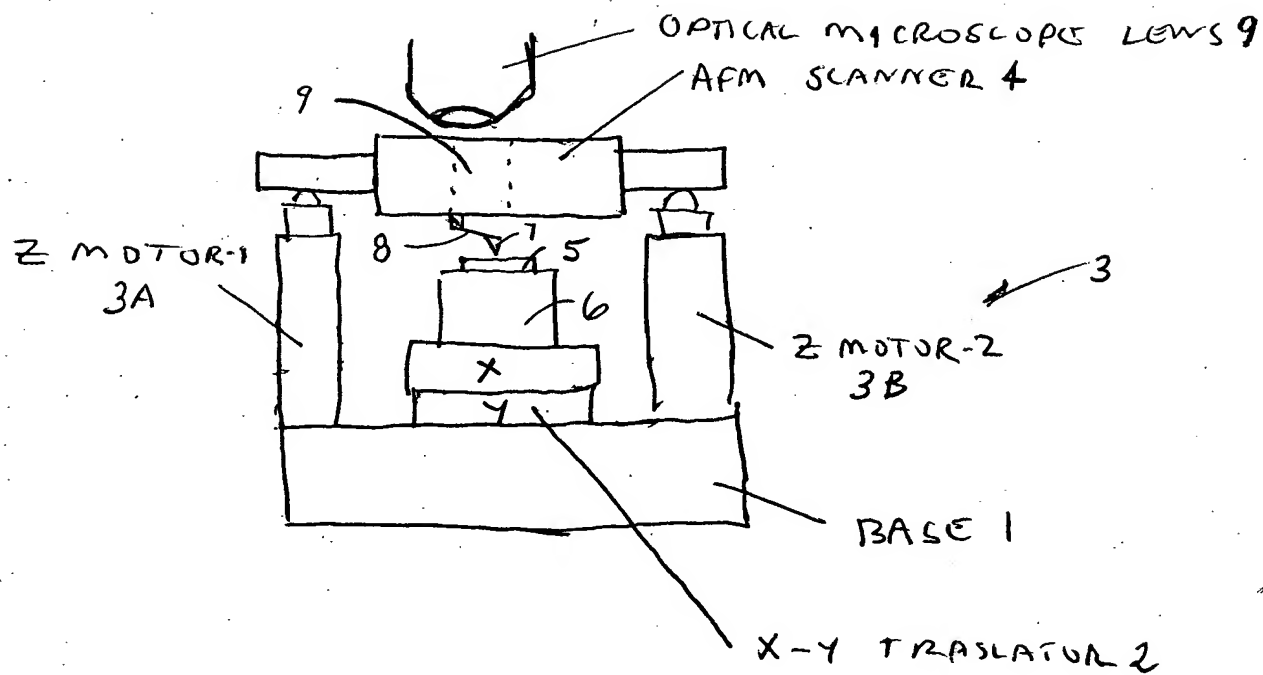


Figure 2

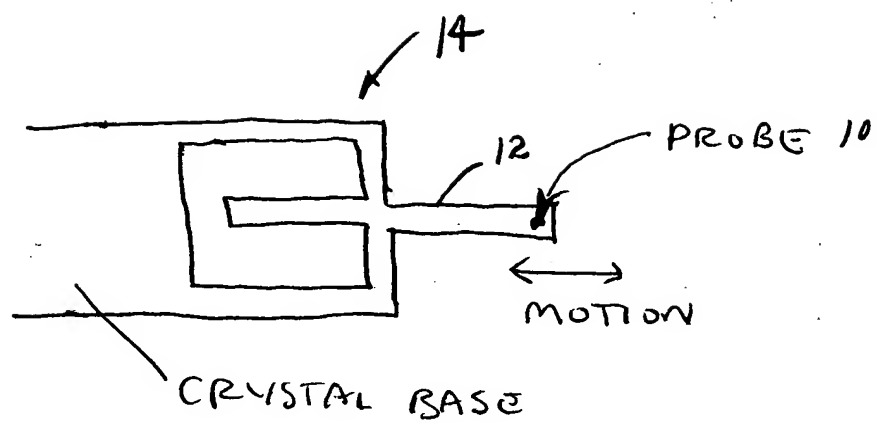


Figure 3

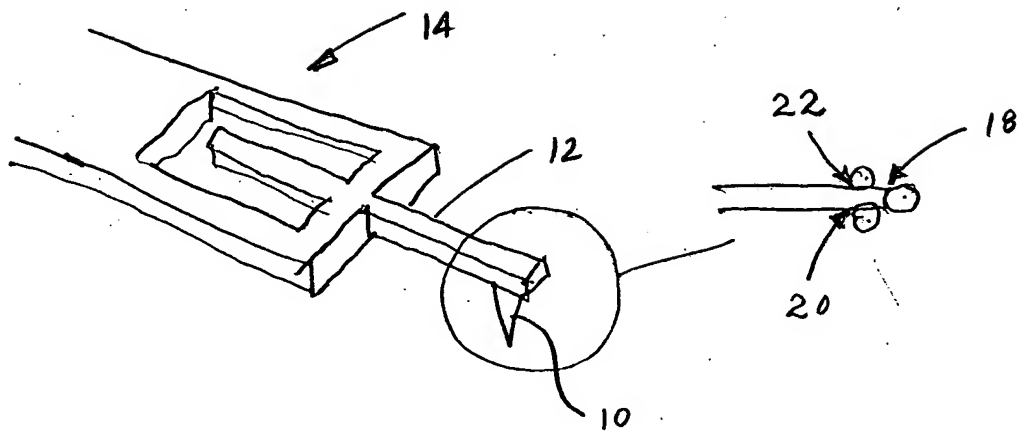


Figure 4A

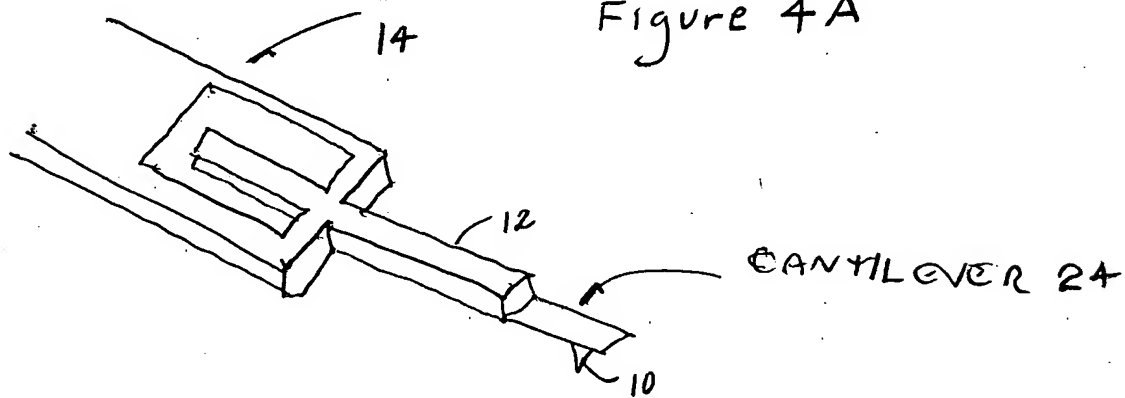
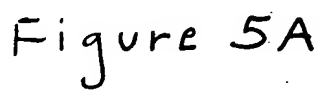


Figure 4B



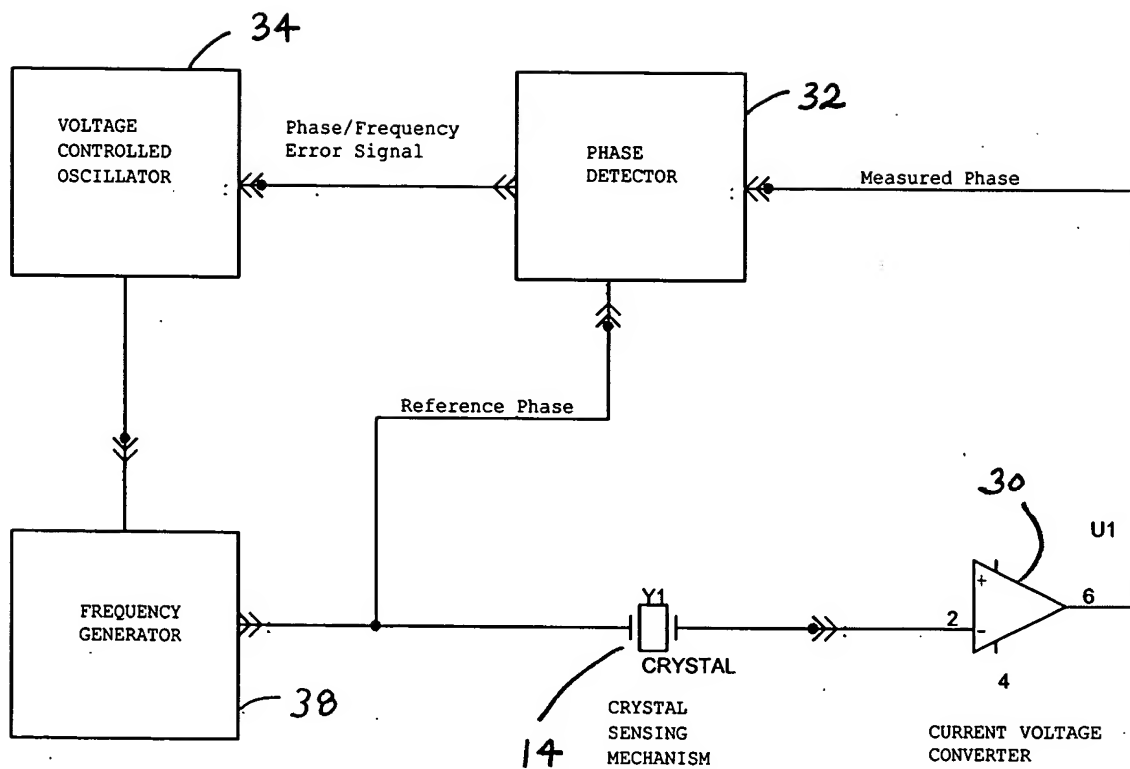


Figure 5B

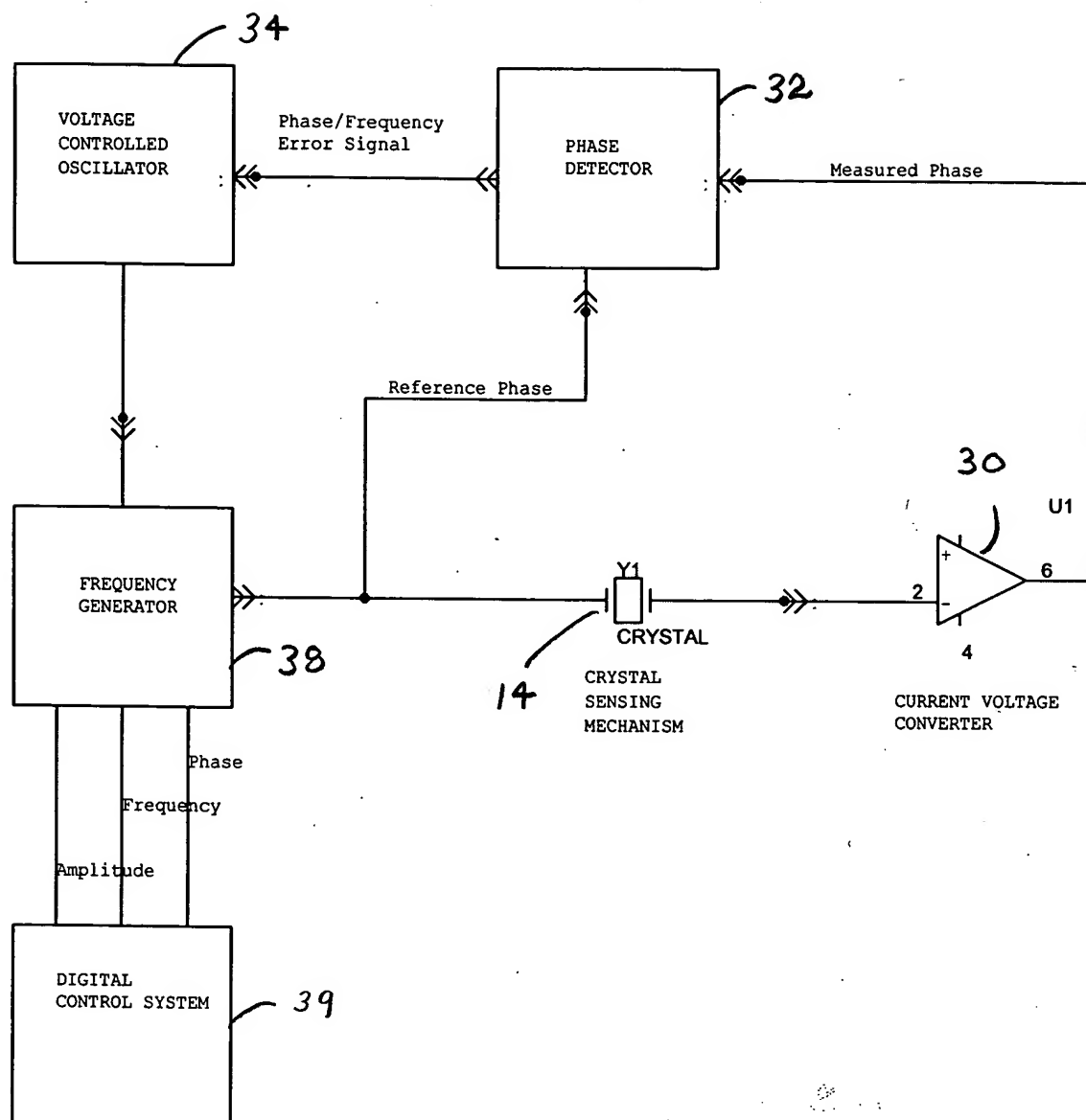


Figure 5C

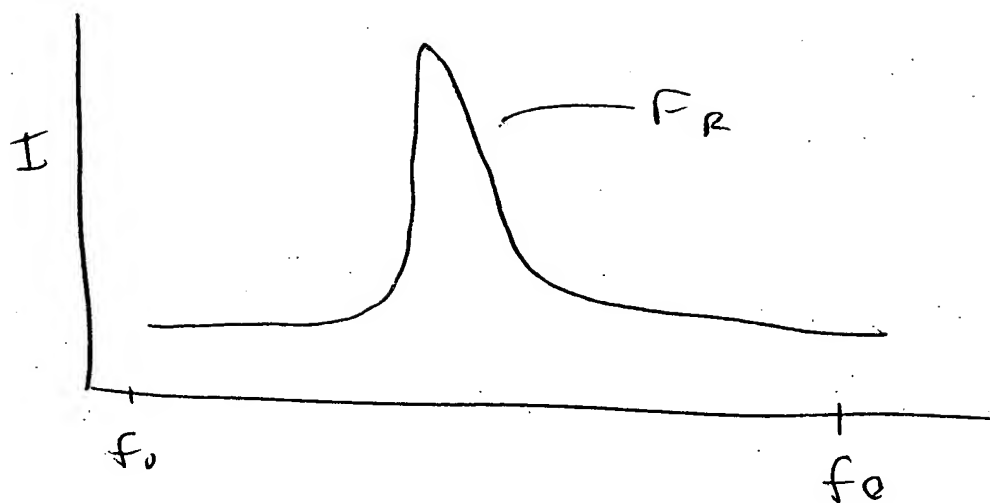


Figure 6



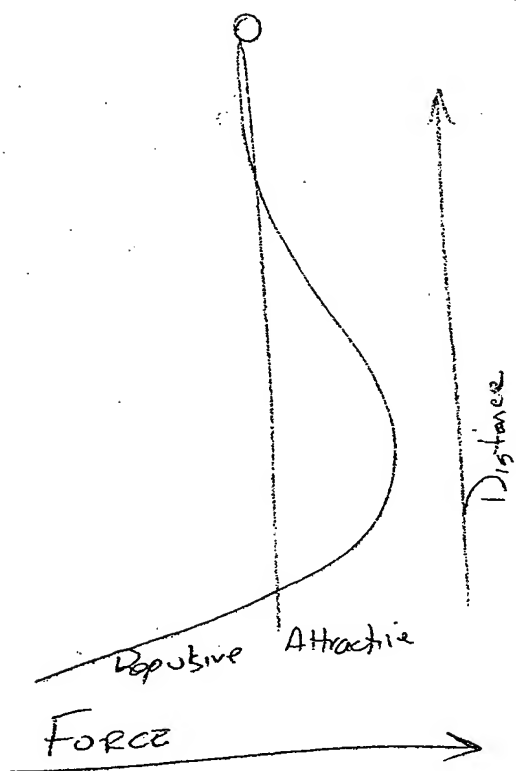
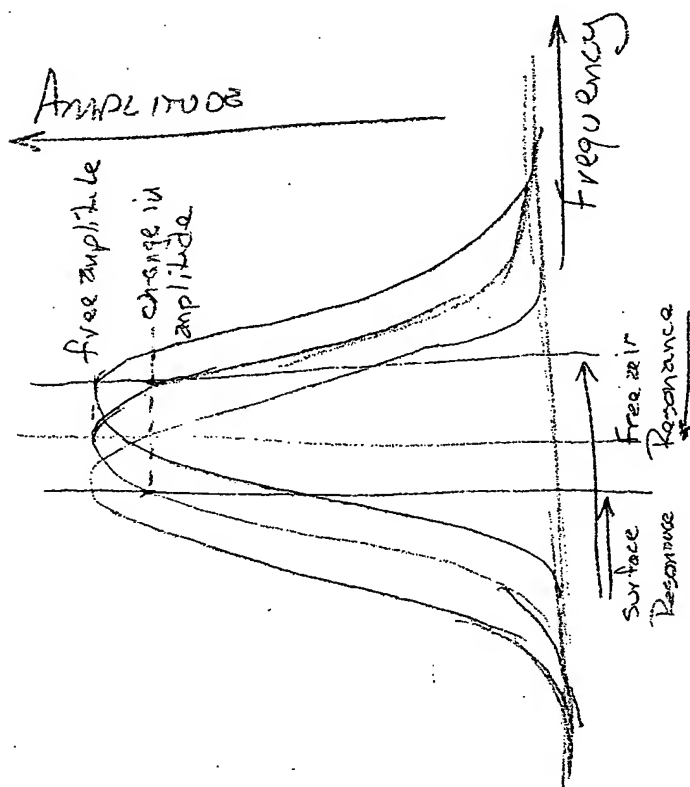
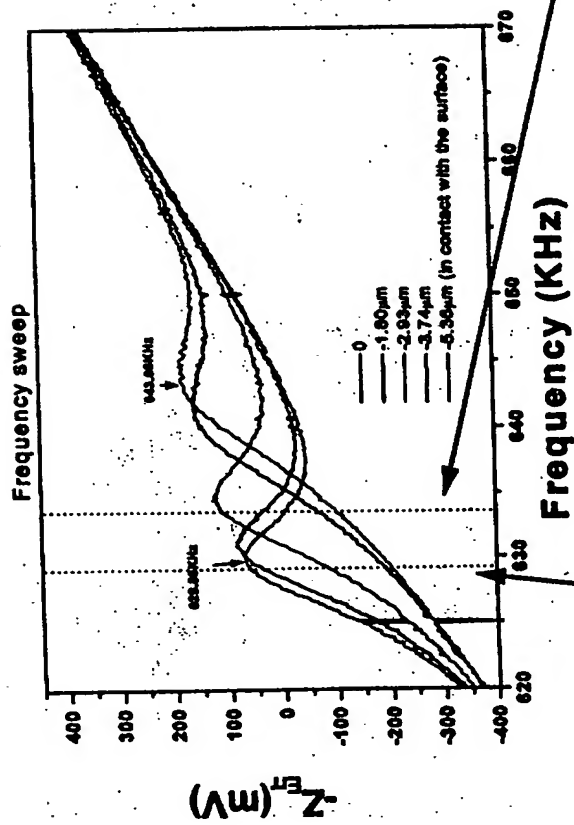


Figure 7



Total frequency shift is over 10KHz

Q factor can be about 2000.

Here We reduced the Q to about 200 in order to decrease the settling time of the crystal.

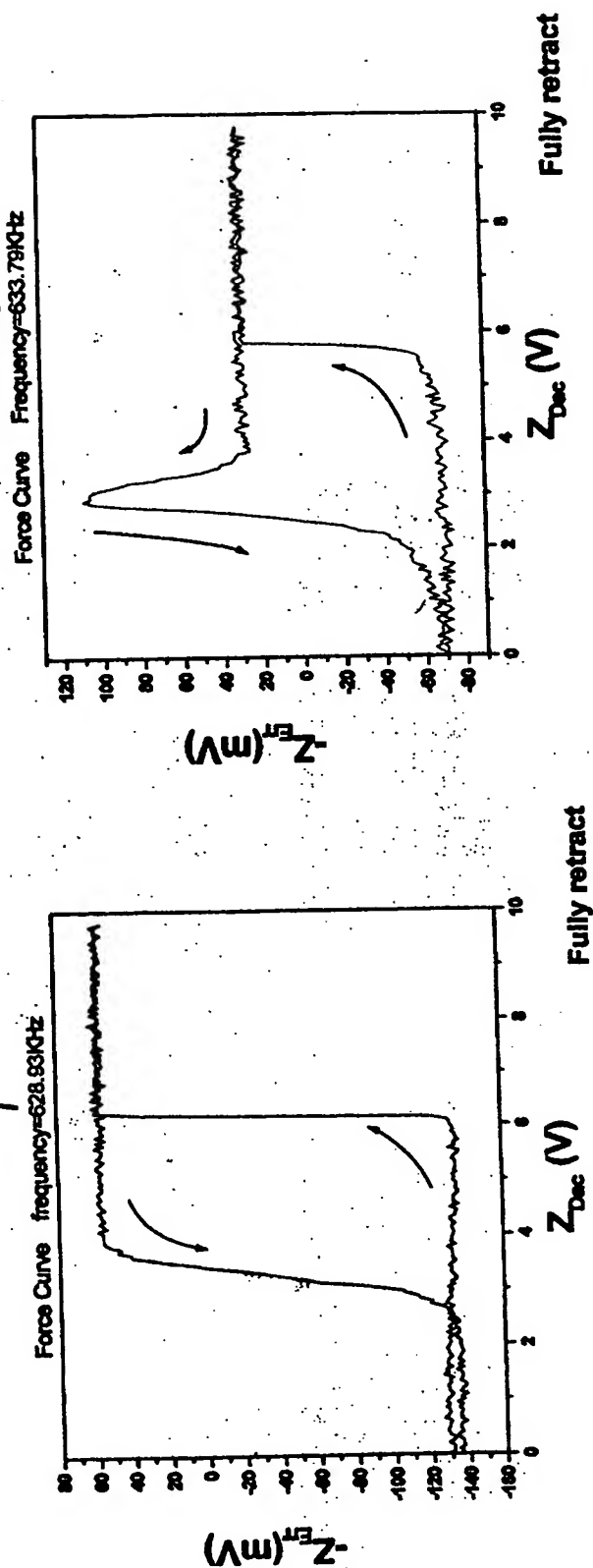


Figure 8

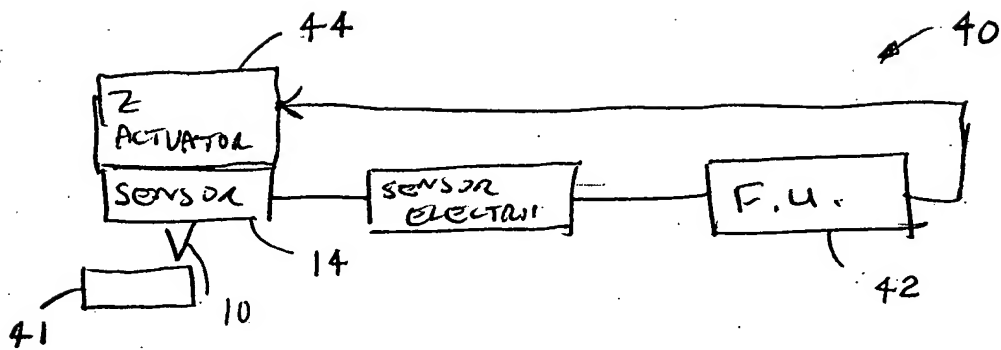


Figure 9

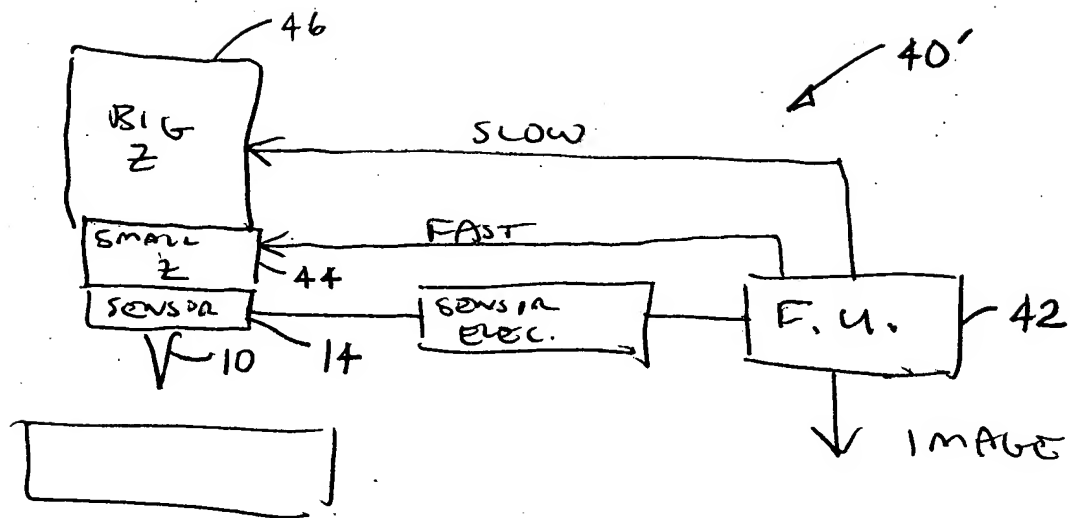


Figure 10

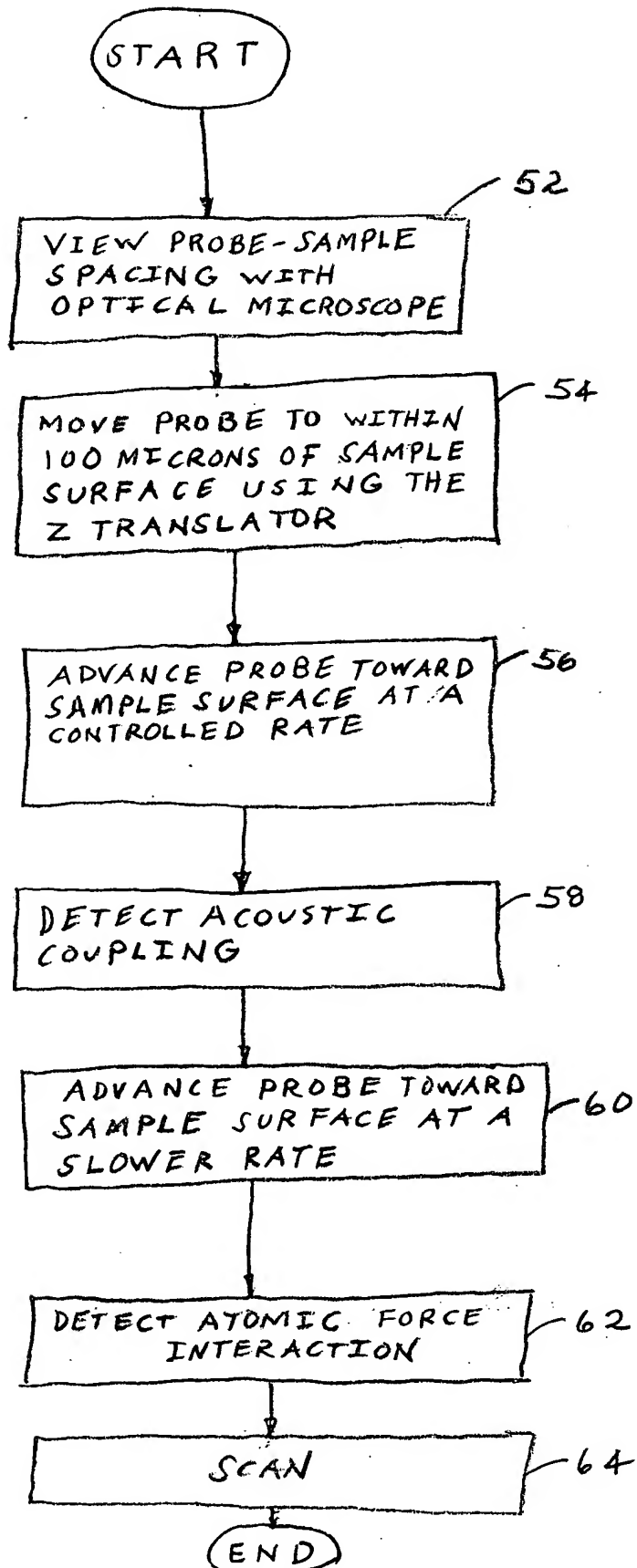


Figure 11